

ABSTRACT

This invention relates to an apparatus for processing an information signal etc. that, when converting, for example, SD signal into HD signal, enables well to be obtained pixel data of HD signal no matter whether the dynamic range DR is large or small. DR in a class tap is detected. If $DR \geq Th$, items of pixel data $y_{1-a}-y_{4-a}$ calculated by using item of coefficient data W_{i-a} corresponding to a class code Ca are estimated as items of pixel data of HD signal. If $DR < Th$, an addition mean value of items of pixel data $y_{1-a}-y_{4-a}$, $y_{1-b}-y_{4-b}$ calculated by using items of coefficient data W_{i-a} , W_{i-b} corresponding to class codes Ca, Cb is estimated as item of the pixel data of HD signal. The items of coefficient data W_{i-a} , W_{i-b} are obtained by learning between a student signal corresponding to the SD signal and a teacher signal corresponding to the HD signal by using a portion of the DR having a value thereof that is not less than the threshold value Th. The code Ca is converted into the code Cb so that the addition mean value can most approach a true value of the pixel data of the HD signal.